

## **Appendix BE-4**

### **UPCC760A Report, Summary of Budget Project Data**

#### **Introduction**

The UPCC760A Report, Summary of Budget Project Data, is a cost accounting report that provides the summary data which is used to track progress toward FTE and basic labor authorizations. It summarizes both monthly and year-to-date hours and dollars accounted for through the payroll system at all organizational levels. Hours are reflected in terms of regular productive, overtime/holiday premium, and regular non-productive (leave, excluding terminal leave) pay. Paid dollars are reflected in terms of basic pay and the various award and premium pay categories (holiday work, overtime, night or Sunday pay differentials, etc.). The report is available at the end of each biweekly pay cycle and at month end. Holders of FTE targets and basic labor dollar budgets are accountable to data reflected in the report for the month ending 30 September of the budgeted fiscal year. The implications of using cost accounting data must be considered in tracking and projection calculations, as discussed below:

#### **Impact of Accrual Cycles**

As a cost accounting report, the UPCC760A Report intentionally reflects expenditures (hours and dollars) incurred each month, and for the year-to-date as of the end of each month, in accordance with cost accounting and reporting requirements at all levels of the Government. Since pay cycles from which the data is captured are continuous 2-week cycles which rarely coincide with the beginning or end of a month, the cost accounting system incorporates an *accrual* cycle for any biweekly pay period which spans a month end. The accrual cycle captures time and attendance data and related cost for the days of the pay period that apply to the current month and adds them to monthly and year-to-date accumulated amounts, which are then reflected in the month end report. The monthly report does *not* lend itself to calculation of FTE status and projections for year end due to the following.

1. **Alternative Work Schedules**: Deviations from the standard 8-hour workday and 5-day workweek generally create a situation in which monthly cost reports do *not* reflect the personnel strength of the workforce. On rare occasions there may be an exception (such as Feb 1998) when payroll cycles actually coincide with the beginning and end of the month. However, when there are deviations, monthly cost reports may still reflect actual expenditures incurred through the end of the report period.

The effect of compressed work schedules on monthly cost data can be illustrated by a hypothetical organization of 10 employees who *all* work 10 hours a day Monday through Thursday, having every Friday off. In April 1998 (refer to a calendar), they would collectively be paid for 1,800 regular hours (10 employees X 10 hours per day X 18 Monday-through-Thursday workdays = 1,800 paid hours) and the resultant monthly FTE calculation (based on 176 standard hours for April) will be 10.2. In May 1998, they will be paid for 1,600 regular hours and the FTE calculation (based on 168 standard pay hours for May) will be only 9.5. On-board strength, however, has remained constant at 10. Monthly cost, and year-to-date

hours and costs, are similarly affected. Organizations will experience this same type of variance according to their individual mix of work schedules, part time employees, and vacancies. While the monthly report will reflect the actual hours and dollars applicable through the end of that month, it may produce varying and inaccurate results for status and projection purposes.

2. Timekeeping: The accrual cycle is run at month end (or within a relatively short time thereafter) and captures only the hours *recorded* in the timekeeping system for the days through month end. It picks up associated cost from payroll system data for *only* those employees whose hours were captured. It adds the hours and dollars to previous accumulated data, after which the monthly report is produced. Hours and cost captured in the accrual cycle are later subtracted from the final biweekly hours and cost to determine amounts which will be included in the next month's report.

If timekeeping is *not* current when the accrual cycle runs, the month end report will *exclude* hours and cost for those employees whose time was not entered when the cycle was run (thus *understating* monthly and year-to-date expenditures). It will also *include* these hours in the following month's report (thus *overstating* monthly expenditures). While these inaccuracies can be avoided by assuring time and attendance input on a daily basis, there are bound to be times when this will not happen. Their existence in monthly records further affects the accuracy of FTE and cost projections using monthly data.

### **Biweekly Reports**

*Biweekly* UPCC760A reports are run at the end of each biweekly payroll cycle and consistently include 80 paid regular hours and associated cost per pay period for each full-time employee, regardless of the schedule worked. Year-to-date data reflects actual hours and cost expended through the date of the report, and is unaffected by the accrual cycle and most timekeeping problems \*. Pure biweekly hours and cost can be isolated by subtracting the previous biweekly report's year-to-date data from the current biweekly report's data. FTE and cost calculations from pure biweekly numbers produce results which accurately reflect the current workforce. The combination of actual year-to-date and pure biweekly status are more accurate in tracking progress toward FTE and dollar budget goals and in projecting year end expenditures.

\* Occasionally, a timekeeping problem is not corrected in time to pay the affected employee through the electronic payroll system. DFAS does everything it can to prevent this situation, but it may still happen from time to time. The affected employee receives a manually prepared paycheck, and payroll system records is adjusted after-the-fact. In these cases, the employee's hours and cost are *not* included in biweekly data for the cycle in which the problem occurred, and the next report reflects the adjustment. This situation is relatively rare, and adjustment to calculations is made when this impact is known to have occurred.

## **Terms and Definitions**

The following terms and definitions are used in discussions relating to basic labor cost and FTEs within DCMC:

- **Full-Time Equivalent (FTE)**: The personnel equivalent resulting from the mix of full- and part-time employment and attrition within an organization, determined over a designated period of time.

For example:

- (1) Two employees each working half time for the entire year would constitute one annual FTE; and
- (2) An organization normally operating with 10 full-time employees which had 1 position vacant for 6 months of the year would utilize 9.5 FTEs for the year.

Manpower resourcing within DCMC is authorized in terms of annual FTE targets. Progress against the target can be calculated for any time period (daily, weekly, biweekly, monthly, year-to-date, or annual) by dividing regular hours worked (or projected to be worked) during the calculation period by standard pay hours included in the same period. Standard pay hours are simply 8 hours per paid day (Monday through Friday, including holidays).

For example, the standard hours for April 1998 are 176, for May 1998 are 168, and for all of FY98 are 2,088. The basic formula for determining the period FTE is as follows:

$$\text{FTE} = \frac{\text{Paid Regular Hours}}{\text{Standard Pay Hours}}$$

- **Basic Labor Cost**: The on-going, routine cost of employing the workforce. It includes amounts routinely paid to employees (normal salary plus other repetitively paid premiums such as night or Sunday differentials, etc.) plus the Government's share of benefits (retirement, life insurance, health benefits, etc.) paid in behalf of those employees. It *excludes* variable costs for such things as lump-sum (terminal) leave, overtime and holiday premium pay, and benefits paid to former personnel.
- **Average Annual Rate (AAR)**: The average basic labor cost per employee, determined by dividing total annual basic labor cost by total FTEs. Basic labor authorizations within DCMC are set by multiplying a projected AAR by the FTEs authorized.

The following pages illustrate several examples and methodologies for calculating and projecting FTEs, basic labor dollars, and other labor dollar expenditures from the data illustrated in the sample reports.

Calculating Org Level FTEs:

	<u>Biweekly</u>	<u>Monthly</u>	<u>Year-to-date</u>
Total Hours	25,517	58,566	168,864
Less OT/Hol Hours	- <u>83</u>	- <u>262</u>	-
<u>785</u>			
Net Basic Hours	25,434	58,304	168,079
Standard Pay Hours	80	184	528
<b>FTE (Net hours divided by Std Pd Hrs)</b>	<b>317.93</b>	<b>316.87</b>	<b>318.33</b>

Calculating Org Level Net Basic Pay:

	<u>Biweekly</u>	<u>Monthly</u>	<u>Year-to-date</u>
Total Dollars Paid (OC 10.0)	672,266	1,547,539	4,585,376
Less 11.19 Term Lv	- 0	- 0	- 3,677
Less 11.29 Term Lv	- 0	- 0	- 454
Less 11.3 Awards	- 50	- 1,850	- 2,850
Less 11.4 Holiday Pay	- 0	- 0	- 596
Less 11.5 Overtime Pay	- 2,101	- 6,587	- 18,660
Less 13.0 Bnfts Frmr Prs	- <u>0</u>	- <u>0</u>	- <u>150,000</u>
<b>Net Basic Pay</b>	<b>670,115</b>	<b>1,539,102</b>	<b>4,409,139</b>

Calculating Org Level AAR:

Net Basic Pay (from above)	670,115	1,539,102	4,409,139
Net Basic Hours (from above)	25,434	58,304	168,079
Basic Hourly Rate (Pay divided by Hrs)	26.3472	26.3979	26.2325
Standard Pay Hours (1998)	2,088	2,088	2,088
<b>AAR (Hourly Rate X Std Pay Hrs)</b>	<b>55,013</b>	<b>55,119</b>	<b>54,773</b>

Projecting Org Level Annual FTE:

Year To Date Basic Hours (calculate from latest biweekly)	172,974
Projected Future Hours	<u>490,884*</u>
Total Project Annual Hours	663,858
Standard Pay Hours (1998)	2,088
<b>Projected Annual FTE (Total Hours divided by Std Pay Hrs)</b>	<b>317.94</b>

\* Projected future hours would be based on the timing of projected gains and losses. This illustration assumes *no* gains or losses over the remainder of the year. The DCMC FTE Execution Plan is programmed in such a way that you can enter your projected gains and losses, and any other impacts to FTE execution, and the calculation of the projected annual FTE is automatic.

Projecting Annual Basic Pay:

Projected Future Hours (from above):	490,884
Current Basic Hourly Rate (biweekly, from above)	26.3472
Expected Pay Raise Percentage	3%
Projected Hourly Increase (% X Curr Rate)	.7904
Projected Hourly Rate (Current plus Increase)	27.1376
Standard Hours @ Current Rate	0*
Projected FTE @ Current Rate	0*
Standard Hours @ Increased Rate	1,564

## Appendix BE-4: UPCE760A Report CALCULATING ACTUAL STATUS FROM REPORT DATA

Note: All illustrations are based on Org Totals at the major organization level for the periods indicated. This report also provides data at lower organization levels *and* at District level, and the same calculations can be performed at those levels.

### FTEs:

	(from Biweekly Rpts)	(from Monthly Rpt)	(from Monthly Rpt)	(from latest BW Rpt)
	<u>Biweekly</u>	<u>Monthly</u>	<u>YTD a/o 31 Dec</u>	<u>YTD a/o 3 Jan</u>
Total Hours	25,517	58,566	168,864	173,775
<i>minus</i> OT/Hol Hours	-83	-262	-785	-718
<i>equals</i> Net Basic Hours	25,434	58,304	168,079	173,057
<i>divided by</i> Standard Pay Hours	80	184	528	544
<i>equals</i> FTE	<b>317.93</b>	<b>316.87</b>	<b>318.33</b>	<b>318.12</b>

### Basic Pay:

	(from Biweekly Rpts)	(from Monthly Rpt)	(from Monthly Rpt)	(from latest BW Rpt)
	<u>Biweekly</u>	<u>Monthly</u>	<u>YTD a/o 31 Dec</u>	<u>YTD a/o 3 Jan</u>
Total Dollars Paid (OC 10.0)	672,266	1,547,539	4,585,376	4,717,056
<i>minus</i> 11.19 Term Lv	0	0	-3,677	-3,677
<i>minus</i> 11.29 Term Lv	-1,366	0	-454	-1,820
<i>minus</i> 11.3 Awards	-50	-1,850	-2,850	-2,850
<i>minus</i> 11.4 Holiday Pay	0	0	-596	-596
<i>minus</i> 11.5 Overtime Pay	-2,101	-6,587	-18,660	-19,066
<i>minus</i> 13.0 Bnfts Frm Prs	0	0	-150,000	-150,000
<i>equals</i> Net Basic Pay	<b>668,749</b>	<b>1,539,102</b>	<b>4,409,139</b>	<b>4,539,047</b>

### Hourly & Annual Rates:

	(from Biweekly Rpts)	(from Monthly Rpt)	(from Monthly Rpt)	(from latest BW Rpt)
	<u>Biweekly</u>	<u>Monthly</u>	<u>YTD a/o 31 Dec</u>	<u>YTD a/o 3 Jan</u>
Net Basic Pay	668,749	1,539,102	4,409,139	4,539,047
<i>divided by</i> Net Basic Hours	25,434	58,304	168,079	173,057
<i>equals</i> Hourly Rate for period	<b>26.2935</b>	<b>26.3979</b>	<b>26.2325</b>	<b>26.2286</b>
<i>times</i> Annual Standard Hours (FY98)	2,088	2,088	2,088	2,088
<i>equals</i> Average Annual Rate for period	<b>54,901</b>	<b>55,119</b>	<b>54,774</b>	<b>54,765</b>

### Other (read directly from report):

	(from Biweekly Rpts)	(from Monthly Rpt)	(from Monthly Rpt)	(from latest BW Rpt)
	<u>Biweekly</u>	<u>Monthly</u>	<u>YTD a/o 31 Dec</u>	<u>YTD a/o 3 Jan</u>
Overtime/Holiday Hours Worked	83	262	785	801
Terminal (Lump Sum) Lv (11.19 + 11.29)	1,366	0	4,131	5,497
Overtime/Holiday Pay (11.4 + 11.5)	2,101	6,587	19,256	19,662
Awards	50	1,850	2,850	2,850
Benefits to Former Personnel (13.0)*	0	0	150,000	150,000

\* Would include such things as VSIP award payments, Separation Pay, etc.

## Appendix BE-4: UPCE760A Report

### PROJECTING FROM REPORT DATA

Projections are done repetitively throughout the fiscal year to assure resourcing status by year end can be expected to fall within the limits of budget authority. Budget execution problems must be noted as early as possible in the year in order to effect appropriate corrective actions, gauge the progress of those actions, and elevate significant problems for determination and/or resolution. There are many variations in projection methodology, but the basic principles are inherent in nearly all cases. The following is a very basic illustration which considers expenses already incurred, projects future expenses, and combines them to project probable year end status. Data used in the illustration is taken directly from the sample reports included in this appendix. Basic methodology adds actual year-to-date expenditures to projections for each remaining month to project total hours, FTEs and dollars for the year. Basic hours for the projection months are calculated by multiplying the expected monthly FTE by the payable hours in the month.

#### Basic Projection:

	<u>FTE</u>	<u>Std Hrs</u>	<u>Expectations</u>	<u>Basic Hours</u>	<u>Hourly Rate</u>	<u>Basic Dollars</u>
Actuals *:	<b>317.93</b>	---	---	173,057	26.2935	4,539,047
4~31 January**	319.93	160	4 gains, 2 losses	51,188	27.0823	1,386,289
February	316.93	160	3 losses	50,708	27.0823	1,373,290
March	315.93	176	1 loss	55,603	27.0823	1,505,852
April	317.93	176	3 gains, 1 loss	55,955	27.0823	1,515,385
May	317.93	168	No Change	53,411	27.0823	1,446,504
June	315.93	176	2 losses	55,603	27.0823	1,505,852
July	317.93	184	3 gains, 1 loss	58,498	27.0823	1,584,266
August	315.93	168	2 losses	53,075	27.0823	1,437,404
September	314.93	176	1 loss	<u>55,427</u>	27.0823	<u>1,501,086</u>

Projected Annual Totals (Hours, Dollars):

**662,525**

**17,794,976**

**Projected FTE (Hours divided by 2,088 Std Hrs)**

**317.30**

**Projected Average Hours Rate (Dollars divided by Hours):**

**26.86**

**Projected Average Annual Rate (Avg Hourly Rate X 2,088 Annual Std Hrs):**

**56,082**

\* FTE and hourly rate columns reflect biweekly status (most representative of the current workforce) and project future changes from that base. Basic hours and dollars are year-to-date actuals as of the end of the same biweekly period.

\*\* The hourly rate for January is increased to estimate the impact of the annual pay raise, which would take effect beginning January 4. A factor of 3% is used in the illustration. A similar projection from the *next* biweekly period would *exclude* this adjustment, since the pay raise impact would already be reflected in the calculated biweekly hourly rate.

#### Other Considerations and Factors:

The expectations above assume known gains and losses for illustration purposes. Gains and losses are *not* so predictable in reality. Local attrition rates, known hiring or loss trends (e.g., retirements are typically high in January), or other factors might be used to estimate future monthly expenditures as realistically as possible.

Projected average hourly rates might be adjusted for known or anticipated impacts. For example, temporary summer employment programs might increase the FTE for the summer months, but lower the average hourly rate for those months. Similarly, average hourly rates would increase when these employees exited at the end of their tour. Step increases, planned promotions or upgrade actions would have a similar effect.

Any other factors which can be expected to affect future costs should be incorporated into local projection methodology so as to assure the most accurate and realistic projection given the facts known at the time the projection is made.



**Appendix BE-4: UPCE760A Report**

REPORT NO. UPCC760a		SUMMARY BUDGET PROJECT DATA						PAGE NO. XQ0038		
ACTIVITY CD: XQ ACTIVITY ABBR: DCRL		FOR MONTH ENDING 31 DEC 1997						DATE: 98.01.04 TIME: 0206		
ORGANIZATION: GX		(FINAL)								
ORGANIZATION TITLE: DCMC XYZ										
BUDGET PROJECT:	6x0.00	600.00		9x0.00		900.00		ORG TOTAL		
		PROG TOTAL				PROG TOTAL				
	CURR MO	FYTD	CURR MO	FYTD	CURR MO	FYTD	CURR MO	FYTD	CURR MO	FYTD
CIVILIAN:										
REG HRS WORKED	7,709	25,363	36,138	118,891	676	2,494	2,307	7,856	38,445	126,747
OT/HOL HRS WORKED	47	123	221	578			41	207	262	785
NON-PROD HRS	4,034	8,297	18,909	38,890	424	777	1,253	2,442	20,162	41,332
(LESS TERM LEAVE)										
TOTAL PAID HRS	11,726	33,783	54,967	158,358	1,099	3,271	3,599	10,506	58,566	168,864
COMP HRS WORKED	78	248	366	1,163		12	10	70	376	1,233
(UNPAID)										
TOT CIV HRS EARNED	11,868	34,031	55,633	159,521	1,099	3,283	3,608	10,575	59,241	170,096
TOTAL MIL HRS	196	563	920	2,640			920	2,640	1,840	5,280
TOTAL CIV & MIL HRS	12,065	34,594	56,553	162,161	1,099	3,283	4,528	13,215	61,081	175,376
TERM LEAV HRS (N/A)		46		217		5		5		222
PERSONNEL COMP										
OBJECT CLASSES:										
11.1 BASIC PAY - FTP	250,367	698,114	1,173,594	3,272,408	24,729	71,329	69,977	299,765	1,243,571	3,572,173
11.19 TERM LV(MEMO)		784		3,677						3,677
11.2 BASIC PAY	5,688	14,684	26,664	68,833		995	7,657	23,790	34,321	92,623
(OTHER THAN FTP)										
11.29 TERM LV (MEMO)		87		407		47		47		454
11.3 CASH AWARDS	395	608	1,850	2,850					1,850	2,850
11.4 HOLIDAY PAY		127		596						596
11.5 OVERTIME PAY	1,184	2,946	5,549	13,809			1,038	4,851	6,587	18,660
11.6 SUN,HAZ DTY,ND	1	1	4	4					4	4
11.7 POST DIFF										
11.8 PREMIUM PAY										
11.9 SPEC SVC PMTS										
11.0 TOT PERS COMP	257,635	737,600	1,207,662	3,457,500	24,729	72,324	78,671	229,407	1,286,333	3,686,907
12.0 PERS BENEFITS	52,870	151,256	247,828	709,013	3,950	11,362	13,378	39,455	261,206	748,468
13.0 BNFTS FRMR PRS		50,000		125,000				25,000		150,000
10.0 TOT PERS SVCE	310,505	920,856	1,455,490	4,316,514	28,678	83,686	92,049	268,862	1,547,539	4,585,376
LABOR COSTS - MIL	8,345	23,947	39,118	112,253			42,033	120,616	81,151	232,869
TOTAL LABOR COSTS	318,850	944,803	1,494,609	4,428,766	28,678	83,686	134,082	389,479	1,628,691	4,818,245

# Appendix BE-4: Biweekly UPCC760A Report

YTD Biweekly Data a/o 3 Jan 98

minus

YTD Biweekly Data a/o 20 Dec 97

equals

Pure Biweekly Expenditure

SUMMARY BUDGET PROJECT DATA FOR BI-WK ENDING 03 JAN 1998				PAGE NO. XQ0038 DATE: 98.01.07 TIME: 0214				PAGE NO. XQ0038 DATE: 97.12.23 TIME: 0226				
ORGANIZATION: GX	ORGANIZATION TITLE: DCMC XYZ											
BUDGET PROJECT:	0											
	OTAL		ORG TOTAL					ORG TOTAL				
	FYTD	CURR MO	FYTD					FYTD	CURR MO	FYTD		
CIVILIAN:												
REG HRS WORKED	7,892	470	127,216					,442	30,306	118,608		8,608
OT/HOL HRS WORKED	219	16	801					195	194	718		83
NON-PROD HRS	86	4,426	45,758					,697	7,763	28,934		16,824
(LESS TERM LEAVE)												
TOTAL PAID HRS	98	4,911	173,775					,334	38,260	148,258		25,517
COMP HRS WORKED	70	10	1,243					70	357	1,214		29
(UNPAID)												
TOT CIV HRS EARNED	10,867	4,921	175,017					,403	38,616	149,471		25,546
TOTAL MIL HRS	720	160	5,440					,320	1,200	4,640		800
TOTAL CIV & MIL HRS	587	5,081	180,457					,723	39,816	154,111		26,346
TERM LEAV HRS (N/A)	83	127	349					5		222		127
PERSONNEL COMP												
OBJECT CLASSES:												
11.1 BASIC PAY - FTP		105,465	3,677,638					,337	808,070	3,136,672		540,966
11.19 TERM LV(MEMO)			3,677							3,677		0
11.2 BASIC PAY		3,498	96,122					,342	22,813	81,116		15,006
(OTHER THAN FTP)												
11.29 TERM LV (MEMO)	0	1,367	1,820					47		454		1,366
11.3 CASH AWARDS			2,850						1,800	2,800		50
11.4 HOLIDAY PAY			596							596		0
11.5 OVERTIME PAY	5,155	405	19,066					,548	4,891	16,965		2,101
11.6 SUN,HAZ DTY,ND			4						4	4		0
11.7 POST DIFF												
11.8 PREMIUM PAY												
11.9 SPEC SVC PMTS												
11.0 TOT PERS COMP		109,368	3,796,277					,226	837,577	3,238,151		558,126
12.0 PERS BENEFITS		22,310	770,781					,874	169,374	656,639		114,142
13.0 BNFTS FRMR PRS			150,000					,000		150,000		0
10.0 TOT PERS SVCE	,102	131,679	4,717,056					,101	1,006,951	4,044,790		672,266
LABOR COSTS - MIL	,271	7,057	239,925					,996	52,925	204,642		35,283
TOTAL LABOR COSTS		138,735	4,956,982					,097	1,059,876	4,249,432		707,550

3 January Biweekly Data

20 December Biweekly Data